fifth edition (1867) with the note that "Var. TERRESTRE Willd., grows in shallow water, or in wet soil, or even 'in sandy prairies' in Illinois (Dr. Mead) either almost glabrous or strigose-hirsute, . . "

Among the early European treatments which mention the American plants Sprengel¹ introduced P. coccineum Muhl. into his edition of the Species Plantarum. Meisner² listed the aquatic form as P. $amphibium \alpha natans$ and the other as β terrestre, citing in addition to Muhlenberg (in Willdenow) and Pursh the Species Plantarum of Willdenow (1799) (which referred only to the European plant), showing that Meisner then regarded the forms of the two continents as identical. In his later and more extensive work³ Meisner does not refer to " γ terrestre" in America, but proposes as " ε Muhlenbergii" the P. coccineum Muhl. which he now regards as distinctly American. It is not necessary in the present connection to discuss later European literature.

(To be continued.)

NOTES ON SAGINA

M. L. FERNALD

In ordering the material of Sagina in the Gray Herbarium it has been found desirable to distinguish two forms which are not ordinarily recognized in America. These may be very briefly noted as follows.

Sagina micrantha (Bunge), n. comb. Spergula micrantha Bunge in Ledeb. Fl. Alt. ii. 183 (1830). Sagina Linnaei, a micrantha (Bunge) Fenzl in Ledeb. Fl. Ross. i. 339 (1841). Sp. semidecandra Turcz, ex Ledeb. l. c. (1841).

This Asiatic species occurs also on the Aleutian and adjacent islands and the islands of Bering Sea. The following are referred here. Alaska: St. Paul Island, J. M. Macoun, nos. 39, 89,644; Attu Island, J. M. Macoun, no. 38; Unga Island, M. W. Harrington.

S. SAGINOIDES (L.) Dalla Torre. The typical plant of the Arctic and of Eurasia has the sepals 2–3 mm. long, the capsules 3.4 mm. long. This extreme occurs southward rather locally to Gaspé Co., Quebec, and in western America to New Mexico and California, but most material of western North America stands apart in having the sepals only 1.3–2 mm. long. This American extreme may be called

¹ Spreng. Syst. ii. 239 (1825).

² Meisn. Mon. Gen. Polyg. Prodr. 67 (1826).

³ Meisn. in DC. Prodr. xiv. 115 (1856).

S. saginoides, var. hesperia, n. var., sepalis 1.3-2 mm. longis.— The following belong here. ALBERTA: Malique Lake, S. Brown, no. 1176; Mt. Temple, Laggan, Butters & Holway. Montana: near melting snow, head of Cottonwood Creek, Tobacco Root Range, alt. 9000 ft., Blankinship. Colorado: Chambers Lake, alt. 9500 ft., Crandall, no. 89 (Type in Gray Herb.). Idaho: near Lolo Divide, Watson, no. 58; near Sohons Pass, alt. 1500 m., Leiberg, no. 1425. UTAH: Dyer Mine, Uintah Mts., Goodding, no. 1346. NEVADA: head of Fall Creek, Ormsby Co., alt. 2460 m., Baker, no. 1332. California: Bear Valley, Parish, no. 1491; border of cold spring above Bluff Lake, alt. 8000 ft., San Bernardino Mts., Parish, no. 3605; Webber Lake, Lemmon; Cloud's Rest, Mariposa Co., Congdon. Oregon: Eagle Creek Mts., Cusick; along rills at 7000 ft., Powder River Mts., Piper, no. 2520. Washington: Mt. Rainier, Allen, no. 51; Cascade Mts., lat. 49°, Lyall. British Columbia: summit of Rocky Mts., alt. 8000 ft., J. Macoun, no. 10; Asulkan Valley, alt. 4100-6000 ft., S. Brown, no. 581; Fish Creek Valley, alt. 5000 ft., Butters & Holway.

GRAY HERBARIUM.

Inconstancy in Color-forms of Hepatica americana.—In the spring of 1918 I took from the woods and set out in my door-yard four clumps of *Hepatica americana* (*H. triloba* of the Manual; see Rhodora xix. 45, March, 1917). Two bore the blue flowers typical of the species, one had them pink (*f. rhodantha* Fernald), and one white (*f. candida* Fernald). All have flourished; one clump yielded 84 blossoms at a single flowering and has never produced less than about 50. All are still thriving. But of the four only one, the white, has kept the color of its flowers wholly unchanged.

The pink form held its color for one season. Then for four years it came white. Last year (1924) it turned pink again and this year it is still pink, though rather pale. One of the blue-flowered clumps has preserved its color, with some little change of shade, until this spring, when it has suddenly and without transitional stages in previous seasons turned a clear lilac-pink. The flowers of the remaining clump are still blue, though this year very pale.

Dr. A. J. Eames has recorded instances of similar inconstancy in Viola pedata, f. rosea and in a color-form of Rudbeckia hirta. In these cases, however, the variation was in a different direction; his pink-flowered violets reverted to the typical blue and the corresponding reversion occurred in the Rudbeckia.